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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,519	04/01/2004	Michael J. Ziegler	1928A1	1571

7590 07/13/2007  
PPG Industries, Inc.  
Law - Intellectual Property  
One PPG Place  
Pittsburgh, PA 15272

EXAMINER
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NILAND, PATRICK DENNIS

ART UNIT	PAPER NUMBER
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1714

MAIL DATE	DELIVERY MODE
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07/13/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/815,519

Applicant(s)

ZIEGLER ET AL.

Examiner

Patrick D. Niland

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1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 16 and 20-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16, 20-27 and 29-51 is/are rejected.
- 7) ☒ Claim(s) 28 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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1. The amendment of 4/20/07 has been entered. Claims 16 and 20-51 are pending.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 16, 20-27, and 29-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 99/47617 Van Den Berg et al..

Van Den Berg et al. discloses oligomers falling within the scope of the instant claims at the abstract; page 1, lines 5-26; page 2, lines 1-29, particularly 26 of which "if so desired" indicates that this component, which appears to be excluded by the last two lines of the instant claim 1, is not required; page 3, lines 1-29, particularly 10-29 which discloses the instantly claimed fatty acids, polyols, and "modification"; page 4, lines 1-23, particularly 12-23; page 5, lines 1-10; page 7, lines 12-29; page 8, lines 1-29, particularly 21-29; page 9, lines 1-26; page 12, lines 7-29; page 13, lines 1-27; page 14, lines 1-28, particularly 8-22; page 15, lines 1-29, particularly 21-26, which includes coating of wood; and the remainder of the document. It would have been obvious to one of ordinary skill in the art at the time of the instant invention to make the instantly claimed oligomer from the disclosure of the reference because it is encompassed by the disclosure of Van Den Berg and would have been expected to give a coating having the properties disclosed by Van Den Berg. Van Den Berg discloses using these in coating substrates including wood which reads on the instantly claimed methods, and curing them oxidatively or with photoinitiators. It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the composition molecular weights and polydispersities of the instant

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claims 32-35 because the molecular weights of the moieties disclosed above are expected to have molecular weights and polydispersities within the broad ranges of the instant claims in order to function as a coating agent and such polydispersities are typical for such oligomeric species.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use no solvent because the oil based compositions of the reference are typically of low enough viscosity to be used without organic solvent and "generally" with regard to solvent usage indicates that solvent is not always required. It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the woods of the instant claim 46 in the form of the instant claim 47 because these are typical woods available in North America which are typically stained with oil based coatings, particularly when they are in the form of the instant claim 47 as is well known. It is not seen that some degree of scratch resistance would not be imparted by the highly crosslinked coatings of the reference in accordance with the instant claim 48.

The photoinitiator of the reference, e.g. page 12, lines 16 et seq. generate free radicals upon exposure to light as is well known to the ordinary skilled artisan. Note the benzoyl portion of the referenced photoinitiators. Thus, modification of the reference in this regard is not required. The instant claims do not exclude the acids of the reference. The applicant's arguments have been fully considered but are not persuasive for the reasons stated above.

4. Claim 28 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

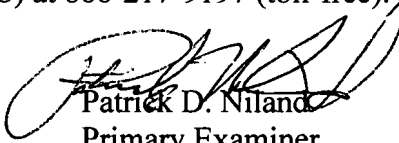
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The prior art does not teach the limitations of these claims nor provide rationale to use these compounds in the compositions of the prior art considered.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick D. Niland whose telephone number is 571-272-1121. The examiner can normally be reached on Monday to Thursday from 10 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Patrick D. Niland  
Primary Examiner  
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